



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,617	07/17/2003	Wouter Ijdo	080395.52547C1	9661

23911 7590 09/24/2004

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,617	Applicant(s) IJDO ET AL.	
	Examiner Michael A Marcheschi	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-17 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1755

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 7, 12, and 21-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

PREVIOUS INDEFINITE REJECTIONS NOT COMMENTED ON BY APPLICANTS:

Claim 7 is indefinite as to the phrase “selected from the group comprising” (part c) because this is not defined in proper Markush language. This should be changed to “selected from the group consisting of”.

Claim 12 is indefinite because it does not define how the pH is adjusted.

NEW INDEFINITE REJECTIONS:

Claims 21-22 are indefinite because the phrase “the pH” lacks antecedent basis since a “pH” has not been **literally** defined before.

Claims 21-22 are also indefinite because it does not define how the pH is adjusted.

Claim 22 is also indefinite as to the phrase “sodium exchanged, sodium smectite clays” (both occurrences) because the examiner is unclear as to what this encompasses, thus rendering the scope of the claim unclear. If the clay is initially sodium smectite, how can it be exchanged with sodium?

PREVIOUS ART REJECTIONS:

Art Unit: 1755

Claims 1, 2, 4 and 10 are rejected under 35 U.S.C. 103(a) as obvious over Allen et al. for the same reasons set forth in the previous office action which are incorporated herein by reference. **In the previous office action claims 1, 2, 4 and 10 were rejected under 103(a) and thus is not a new rejection (i.e. see 102/103 rejection previously applied).**

Claims 3, 5, 7-9, 11 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. in view of (1) JP 59-7085 and (2) JP 49-107024 for the same reasons set forth in the previous office action which are incorporated herein by reference. **The rejection of claims 12-13 based on this reference has been withdrawn.**

Claims 1, 2, and 10 are rejected under 35 U.S.C. 103(a) as obvious over Brown et al. for the same reasons set forth in the previous office action which are incorporated herein by reference. **In the previous office action claims 1, 2 and 10 were rejected under 103(a) and thus is not a new rejection (i.e. see 102/103 rejection previously applied).**

Claims 3, 5, 7-9, 11-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. in view of Allen et al. and further in view of (1) JP 59-7085 and (2) JP 49-107024 for the same reasons set forth in the previous office action which are incorporated herein by reference.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as obvious over Mardis et al. for the same reasons set forth in the previous office action which are incorporated herein by reference. **In the previous office action claims 1 and 2 were rejected under 103(a) and thus is not a new rejection (i.e. see 102/103 rejection previously applied).**

Claims 3-5, 7-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mardis et al. in view of Allen et al. and further in view of (1) JP 59-7085 and (2) JP 49-

Art Unit: 1755

107024 for the same reasons set forth in the previous office action which are incorporated herein by reference.

NEW ART REJECTIONS

Claims 21-22 are rejected under 35 U.S.C. 103(a) as obvious over Brown et al.

The reference uses sodium bentonite clay and it is the examiners position that the claimed specific form (beneficiated or unbeneficiated) is obvious because the reference teaches sodium smectites, in general, and this encompasses and makes obvious any and all forms (both beneficiated or unbeneficiated) because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** In view of this, since the reference encompasses beneficiated clay, a beneficiating step is obvious. The reference uses a phosphonate additive and it is the examiners position that the claimed specific phosphonates are obvious because the reference teaches phosphonates, in general, and this encompasses and makes obvious any and all phosphonates because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** With respect to the pH, although the reference does not literally define the pH **of the composition**, this does not preclude the material of the reference from having this characteristic (especially since all compositions have a pH). It is therefore the examiners position that since the reference fails to mention any specific pH (criticality), this (the absence of

Art Unit: 1755

any such limitation) constitutes a broad teaching of pH values. In view of this, it can be reasonably interpreted that the claimed pH is encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality). Since all compositions have a pH, burden is upon applicants to show that the pH of the reference is outside the claimed pH. Since all compositions have a pH, as defined above, the adjustment of the pH to fall within a specified range, depending on the use of the composition, is obvious to one skilled in the art.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as obvious over Mardis et al.

The reference uses sodium smectite clay and it is the examiners position that the claimed specific form (beneficiated or unbeneficiated) is obvious because the reference teaches sodium smectites, in general, and this encompasses and makes obvious any and all forms (both beneficiated or unbeneficiated) because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** In view of this, since the reference encompasses beneficiated clay, a beneficiating step is obvious. The reference uses a phosphonate additive and it is the examiners position that the claimed specific phosphonates are obvious because the reference teaches phosphonates, in general, and this encompasses and makes obvious any and all phosphonates because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** With respect to the pH, although the reference does not literally define the

pH **of the composition**, this does not preclude the material of the reference from having this characteristic (especially since all compositions have a pH). It is therefore the examiners position that since the reference fails to mention any specific pH (criticality), this (the absence of any such limitation) constitutes a broad teaching of pH values. In view of this, it can be reasonably interpreted that the claimed pH is encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality). Since all compositions have a pH, burden is upon applicants to show that the pH of the reference is outside the claimed pH. Since all compositions have a pH, as defined above, the adjustment of the pH to fall within a specified range, depending on the use of the composition, is obvious to one skilled in the art.

Applicant's arguments filed 7/14/04 have been fully considered but they are not persuasive.

Applicants argue that Allen et al. teaches alkaline earth smectite clays and not alkali metal smectite clays as required by the instant claims. The examiner acknowledges that the initial clay of the reference is an alkaline earth smectite clay. However, it is clearly stated in column 2, lines 18-20 that the alkaline earth smectite clay is activated to produce an **alkali metal smectite clay** (i.e. initial clay is activated to sequester the alkaline earth metal). In view of this, although the initial clay might be an alkaline earth smectite, the resulting clay (final product) after activation is an alkali metal smectite clay. In other words, the final clay product of the reference, after activation, meets the claimed limitations. The examiner acknowledges the declaration submitted to the extent of showing sodium clays are different from alkaline earth

Art Unit: 1755

clays. However, as defined above, the reference clearly teaches a final product which is an **alkali metal smectite clay**. Applicants also argue that Allen et al. can not be combined with the other references because this would not result in a sodium smectite clay slurry. Contrary to applicants position these additional references have only been applied to show various known usages for activated clay composition and any of said usages would have been obvious to the skilled artisan.

Applicants argue that Brown fails to teach a viscosity stable slurry in view of the disclosure in column 3, line 65-column 4, line 2. Applicants state that this passage defines that the slurries remain pumpable for **only** 1 hour without agitation (and only remains pumpable with agitation). The examiner fails to see how the references does not teach a viscosity stable composition because, contrary to applicants statement, the passage defined in column 3, line 65-column 4, line 2 sets forth that slurry will remain pumpable for an hour **or more** in the absence of agitation (i.e. not limited to only 1 hour as argued). This implies that the viscosity is stable for 1 hour or more without agitation. Since Applicants place no limitation of the time frame for the viscosity stable limitation, no distinction is seen to exist. In addition, the reference implies that the viscosity is stable indefinitely as long as agitated. Applicants state that the claimed invention is stable without agitation. Since this limitation is not claimed, no distinction is seen to exist. Applicants also appear to argue the instant examples for establishing patentability over this reference. This is not persuasive because applicants do not compare the claimed invention with that of the reference. Applicants also argue that Brown can not be combined with the other references because this would not result in a sodium smectite clay slurry. Contrary to applicants position these additional references have only been applied to show various known usages for

Art Unit: 1755

activated clay composition and any of said usages would have been obvious to the skilled artisan. In addition, a grouting composition can broadly be considered a construction material because grouts are used in construction. With respect to the claimed phosphonate compounds, as previously defined, it is the examiners position that the claimed specific phosphonates are obvious because the reference teaches phosphonates, in general, and this encompasses and makes obvious any and all phosphonates because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".**

Applicants argue that Mardis et al. does not disclose the claimed phosphonate compounds, but as previously defined, it is the examiners position that the claimed specific phosphonates are obvious because the reference teaches phosphonates, in general, and this encompasses and makes obvious any and all phosphonates because **"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".** In addition, column 7, lines 27+ literally teaches at least an additive which meets the limitations of compound (c). Applicants also argue the viscosity stable limitation but fail to provide any evidence showing that the reference material does not fall within this category. Finally, applicants argue that the reference includes a quaternary cationic compound. Applicants use "comprising" which opens the claims to this component. Applicants also argue that Mardis et al. can not be combined with the other references because this would not result in a sodium smectite clay slurry. Contrary to

Art Unit: 1755

applicants position these additional references have only been applied to show various known usages for activated clay composition and any of said usages would have been obvious to the skilled artisan.

In view of the teachings as set forth above, it is still the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A

Art Unit: 1755

reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

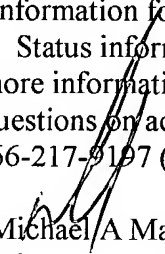
Claims 14-17 are allowable over the prior art of record because the references fail to teach the claimed method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MM
9/04


Michael A Marcheschi
Primary Examiner
Art Unit 1755